

Reducing Waste and Increasing Recycling in Truro, Ma

March 2016

Table of Contents

About WasteZero

Pay-As-You-Throw Overview

WasteZero Trash Metering®

PAYT in Massachusetts

Potential Program Results

Next Steps

About WasteZero





- In business since 1991, & 100% driven to cut trash in half across the US
- 850+ programs under management; @125 in Massachusetts
- Helps municipalities reduce waste, increase recycling, & save money
- Specializes in PAYT programs, with experience in all types
- Has @ 100% success rate with WasteZero-designed programs
- Offers consulting, as well as program design & management
- Is a certified B Corp, meeting rigorous social & environmental standards
- Is based in Raleigh, NC, with regional support around the nation

Capability

Analysis



Consulting

Concept



Program Design



Community Engagement

Reality



Program Implementation

Results



Program Management

The Trash Problem: Financial & Environmental

- Many cities are struggling financially, and solid waste is a big contributor.
- The cost of trash has risen 2.4 times faster than inflation over the last 30 years.
- Often, trash fees do not cover the full costs.
- Even financially healthy communities spend more than they need to on trash.
- Our mission to cut the trash in half and help communities...

Solve Financial Challenges

- Generate revenue
- Reduce costs
- Align revenues with costs
- Free up resources

Achieve Environmental Goals



- Reduce waste
- Increase recycling
- Save energy and resources
- Reduce greenhouse gases

The Cause of the Problem: Our "Broken" Trash System







Water



Residents pay for most utilities based on how much they use. Trash is different: In most places, trash is the last unmetered utility...











3 Blank Check



"Fill 'er up!"

The flat fee or "no fee" approach causes waste and does not provide any incentive to recycle. Often, municipalities are frustrated that they are unable to engage with residents in ways that change behavior.

The Solution: Pay-As-You-Throw

With PAYT, residents pay for trash based on how much they generate. If they recycle more and throw away less, they pay less. The economic incentives to reduce waste are strong.

Benefits:

- ✓ Solid waste is reduced
- ✓ Recycling increases
- ✓ Collection and disposal costs drop
- ✓ The environment is improved
- ✓ Landfill life is extended





Types of PAYT

PAYT programs can take many different forms. Bag-based systems are by far the most effective, in WasteZero's experience.



Cash

Up to 30% Average Waste Reduction

Residents pay a set fee in cash for each bag they dispose of at a convenience or transfer station. Not feasible with curbside trash collection.



Variable-Rate Carts

15% Average Waste Reduction

Residents choose from among different sizes of carts, paying more for the larger carts and less for the smaller ones.



Overflow

<5% Average Waste Reduction

Residents pay a flat fee that covers everything they can fit into a certain size cart, and then pay extra (usually by the bag) to dispose of anything that does not fit into that cart



Stickers/Tags

25% Average Waste Reduction

Residents pay by the bag by affixing a pre-paid tag or sticker to each bag of trash.



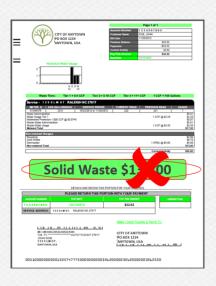
Bag-Based Model 44% Average Waste Reduction

Residents dispose of their waste in specialized bags approved by the municipality and clearly marked with the municipal seal or other unique instructions or information.

The WasteZero Bag-Based PAYT Model

WasteZero's primary approach to PAYT is the most effective available means of reducing municipal solid waste, and it works with all collection methods.

- 1 Cut Fees (if possible)
- 2 Pay per Bag for Trash
- **3** Residents Recycle More







- Fairer to residents
- Easy to implement
- Works better than any alternative

- No direct cost to the City
- Works with any collection method

The WasteZero Bag-Based PAYT Model

WasteZero Trash Metering® is a comprehensive, turn-key offering for municipalities. A Program Management team provides a single point of contact for each city or town.

Official Bags



- US-made by WasteZero
- Drawstring closure for convenience, litter control
- Trash and recycling bags differentiated by
 - Color
 - Printing

Distribution



- Delivery to retailers for sale or distribution to residents
- Retailer relationship management
- Order processing and fulfillment
- Inventory management
- Customer service
- Accounting and reporting

Communications



- Communications support to educate residents about the program:
 - Town Meetings
 - Launch Announcements
 - Program Web Site
 - Ongoing Toll-Free
 Customer Service Line
 - Educational Materials

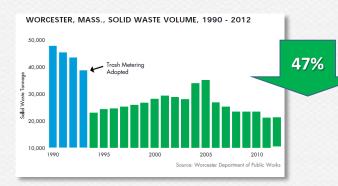
Media Support

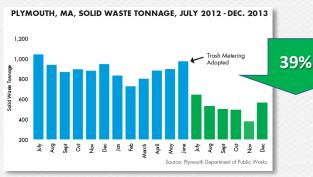


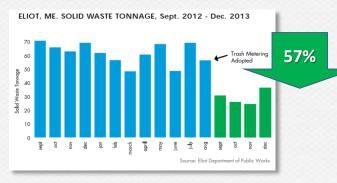
- Media relations support to help the City prior to launch, as well as on an ongoing basis after launch:
- Press briefings
- Talking points
- Press releases
- Data collection (regarding program results)
- Media briefings regarding program successes

Typical Results

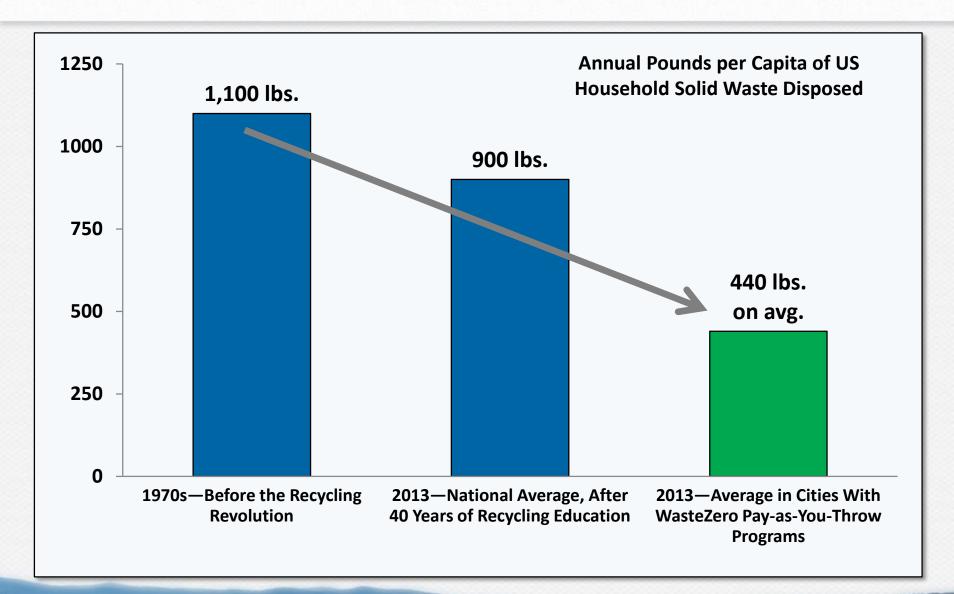
- Average reduction of MSW and disposal costs of 44%
- Substantial increases in recycling
- Significant results within 30-90 days
- Permanent impact
- Effective in cities and towns, regardless of
 - Population size
 - Average income level
 - Numerous demographic factors
 - Method of trash collection







Typical Results - Continued

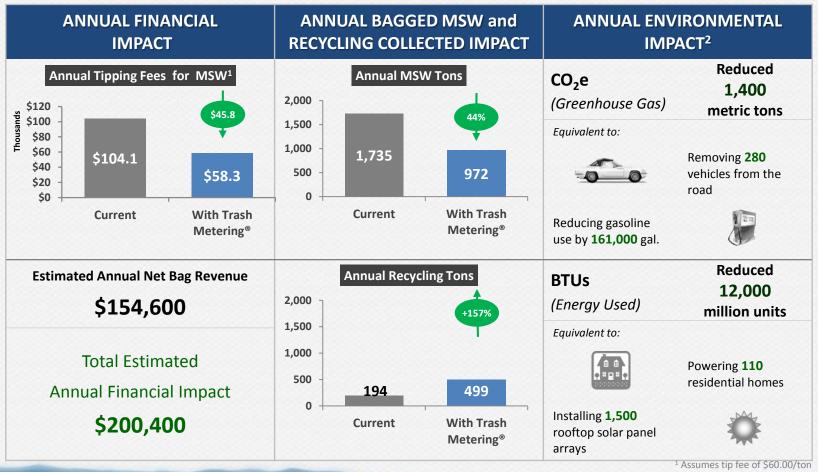


Municipal Impact



TOWN OF TRURO, MA

TRASH METERING® IMPACT SUMMARY





² Source: EPA WARM Model

Pre-Approval Public Engagement

Contract Program Program
Award Approval Launch



Pre-Approval Public Engagement

Pre-Launch Communication

Ongoing Program Support

Objectives:

- Educate residents and community leaders about the City's specific need for waste reduction
- Explain the proposed solution & how it would work
- Outline the projected financial and environmental benefits of the program
- Explain how the program would affect / benefit residents
- Answer residents' questions and collect input

| Component | Description |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| Key Messages | Talking points for City leaders regarding the need for the program, the proposed solution, and its benefits |
| Educational Web Site | Website—with Facebook and Twitter accounts—to help implement the objectives above |
| Stakeholder Briefings | Face-to-face meetings to orient/educate key elected leaders and City staff, as well as up to five key community groups and/or local community leaders |
| Media Briefings & Support | Face-to-face meetings to brief prominent local media on the need and the proposed solution; Ongoing media support as needed by the City |
| Public Meetings | Presentations and Q&A sessions at up to 4 public meetings, moderated by City staff and leaders according to best practices for such forums |

Pre-Launch Communication

Contract Program Program Award Approval Launch



Pre-Approval Public Engagement

Pre-Launch Communication



Ongoing Program Support

Objectives:

- Ensure that residents understand the program, how it works, and when it is set to start
- Give residents the information they need to participate effectively in the program
- Provide information that will help residents more effectively reduce, reuse, and recycle

| Component | Description |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Program Website | Website providing information about the program & how to participate |
| Resident Education Materials | Series of customized flyers made available to the City (in electronic format) that can be printed & distributed to residents regarding ways to reduce, reuse, and recycle |
| Program Flyer | Flyer made available to the City (in electronic format) that can be printed & distributed to residents; Contains key information from the Program Website & Launch Announcement |
| Launch Announcement | Mailing to all residents communicating the program launch date & other key information |
| Media Support | Ongoing communications with the media, as needed and directed by the City |

Ongoing Program Support

ContractProgramProgramAwardApprovalLaunch



Pre-Approval Public Engagement

Pre-Launch Communication

Ongoing Program Support

Objectives:

- Ensure that residents continue to participate effectively in the program
- Ensure that the program meets its objectives
- Help the City measure and communicate success
- Help the City ensure the program continues to perform optimally

| Component | Description |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Program Website | Website providing information about the program & how to participate |
| Customer Service Line | Toll-free automated line to provide program information to residents; Provides connection to live customer service if needed |
| Program Analytics | Ongoing collection of data provided by the City (trash and recycling tonnage, costs, etc.), benchmarking of program effectiveness, and ongoing performance assessment. |
| Success Stories | Use of program analytics data at key milestones (3-months, 6-months, 1 year, 5 years) to develop media-friendly case studies to communicate success |



Chris Hubbard

Director,

Municipal Partnerships

chubbard@wastezero.com

(c) 401.601.0523

www.wastezero.com